

Title (en)

Startup procedure for international line powered DAA

Title (de)

Verfahren zum Anfahren für ein internationales leitungsgespeistes DAA

Title (fr)

Procédé de démarrage pour un DAA international telealimente

Publication

EP 1093276 B1 20071128 (EN)

Application

EP 00308676 A 20001003

Priority

US 41456899 A 19991008

Abstract (en)

[origin: EP1093276A2] A line powered data access arrangement (DAA) is disclosed which adaptively allows proper operation with power supplied from a telephone line as conditions warrant, while at the same time satisfying the relevant requirements of many countries. In the line powered codec, a startup procedure for the international line powered codec uses register settings, e.g., country-specific register settings, which are powered and maintained from the low voltage side (e.g., from the PC or modem side) of the line powered codec. In this way, even during low line power conditions the programmed state of the line powered codec can be maintained, thus a default condition will not necessarily returned to by the line powered codec upon reset due to a power loss in the telephone line. In another aspect, a charge storage device such as a charge capacitor is charged from a charge pump formed from a differential clock signal from the low voltage side. A current and voltage detection module in the line powered codec is always powered from the telephone line. Upon detection of an off-hook signal or a power down condition, the current detection module determines if/when the current and voltage on the telephone line is sufficient to power certain circuits on the line powered codec. If sufficient power is not present, the line powered codec does not power up. However, the line powered codec will power up if sufficient current is detected. In another aspect, a plurality of power rails may be provided. A first power rail may be associated with the line power, a second power rail may be associated with a low voltage side power source, e.g., a charge storage device. A third (and other) power rails may be switchably connected to either the first power rail or second power rail as line power conditions and on-hook/off-hook conditions warrant. <IMAGE>

IPC 8 full level

H02J 7/00 (2006.01); **H04M 3/00** (2006.01); **H04M 1/00** (2006.01); **H04M 11/00** (2006.01); **H04M 19/00** (2006.01); **H04M 19/08** (2006.01)

CPC (source: EP KR US)

H04M 11/00 (2013.01 - KR); **H04M 19/005** (2013.01 - EP US); **Y02D 30/70** (2020.08 - EP)

Cited by

EP1096773A3

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 1093276 A2 20010418; **EP 1093276 A3 20031112**; **EP 1093276 B1 20071128**; CA 2322252 A1 20010408; CA 2322252 C 20050419; DE 60037230 D1 20080110; DE 60037230 T2 20081009; EP 1890469 A1 20080220; EP 1890469 B1 20110601; JP 2001186270 A 20010706; JP 3681971 B2 20050810; KR 100439456 B1 20040709; KR 20010050923 A 20010625; TW 480870 B 20020321; US 6674857 B1 20040106

DOCDB simple family (application)

EP 00308676 A 20001003; CA 2322252 A 20001004; DE 60037230 T 20001003; EP 07121664 A 20001003; JP 2000309803 A 20001010; KR 20000059171 A 20001009; TW 89121011 A 20001017; US 41456899 A 19991008